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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MICROLENS AND METHOD OF MAKING SAME

(57) Abstract: A method of forming a microlens, comprising providing a doped glass having at least one metallic component other than copper, and locally irradiating the doped glass by a continuous wave laser beam, so as to melt a portion of the doped glass, thereby to form the microlens.



International application No.

PCT/IL03/00516

A. CLASSIFICATION OF SUBJECT MATTER IPC(7): C03C 21/00, 23/00; G02B 3/00 US CL: 65/30.13, 102; 264/1.32, 1.37; 359/620 According to International Patent Classification (IPC) or to both national classification and IPC					
B. FIELDS SEARCHED					
Minimum documentation searched (classification system followed by classification symbols) U.S.: 65/30.13, 102; 264/1.32, 1.37; 359/620; 219/121.6, 121.61					
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched					
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet					
C. DOCUMENTS CONSIDERED TO BE RELEVANT Cotecony * Citation of document with indication where appropriate, of the relevant passages Relevant to claim No.					
Category * Citation of document, with indication	Citation of document, with indication, where appropriate, of the relevant passages				
	US 5,768,022 A (LAWANDY) 16 June 1998 (16.06.1998), col. 3, line 57 to col. 8, line				
Y 9.	9. 66-141, 174-221				
Y JP 59-190240 A (TOYOTA MOTOR CORP.) 29 October 1984 (29.10.1984), English abstract.				96-141, 174-221	
X US 6,218,774 B1 (POPE) 17 April 200 26-47.	US 6,218,774 B1 (POPE) 17 April 2001 (17.04.2001), figures 5 and 6 and col. 16, lines 66-87 26-47.				
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Further documents are listed in the continuation	of Box C.		See patent family annex.		
* Special categories of cited documents:				he international filing date or priority application but cited to understand the	
"A" document defining the general state of the art which is not cons	idered to be		principle or theory underlying t		
of particular relevance "E" earlier application or patent published on or after the internation	nal filing date			e; the claimed invention cannot be onsidered to involve an inventive step	
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means		"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is		
		combined with one or more other s being obvious to a person skilled in		er such documents, such combination d in the art	
"P" document published prior to the international filing date but later than the priority date claimed		"&" document member of the same patent family			
Date of the actual completion of the international search		Date of mailing of the international search report 21 JAN 2004			
14 November 2003 (14.11.2003) Name and mailing address of the ISA/US		Authorize	d officer		
Mail Stop PCT, Attn: ISA/US	il Stop PCT, Attn: ISA/US Sean E Vincent DESCRIPTION OF THE PROPRIES OF THE				
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P.O. Box 1450 Alexandria, Virginia 22313-1450 Recsimile No. (703)305-3230 Telephone No. 703-308-0651 PARCLEGAL SPECIALISY Recsimile No. (703)305-3230					

BOX II. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

Group I claim(s) 1-65, drawn to a method of making microlenses.

Group II, claim(s) 66-87, drawn to microlenses.

Group III, claim(s) 88-95, drawn to optical devices.

Group IV, claim(s) 96-221, drawn to methods of doping glass and making microlenses.

The inventions listed as Groups I, II, III and IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the feature common to all four claim groups, i.e. non-copper doped glass microlens, is not novel because it is disclosed by US 5,604,635 A (Lowandy) in col. 6, lines 5-27 and 52-68. Therefore, there is no corresponding special technical feature of all four claim groups.

Continuation of B. FIELDS SEARCHED Item 3:

IEEE Xplore

search terms: microlens, laser, iron, cerium, nickel, silver, gold